TRANSPORTATION CONCEPT REPORT
STATE ROUTE 125

11-SD-125 P.M. S.D. 0.0 - 30.4

DECEMBER, 1994

State of California
Department of Transportation
District 11 - System Planning Branch
2829 Juan Street
P.O. Box 85406
San Diego, California 92186-5406

TABLE OF CONTENTS

LIST OF TABLES

TRANSPORTATION CONCEPT SUMMARY
STATE ROUTE 125
11-SD-125 P.M. S.D. 0.0 - 30.4

TRANSPORTATION CONCEPT (2015)

The components of the 2015 Transportation Concept include State highway, transit service, and arterial street improvements. The State highway component is listed in Table S-1, while the others are discussed below and in the Concept Rationale section. These components are examined in segments for traffic analysis and other purposes. The segmentation shown is for planning purposes only and is subject to change pending further studies. The State highway component is comprised of the facility type and the number of lanes for 2015, the Average Daily Traffic (ADT) for 2015, the peak hour Demand to Capacity (D/C) Ratio for 2015, the peak hour Operating Level of Service (LOS) for 2015, the Transportation Concept LOS for 2015, and whether the segment is currently in the rural or urban area, and the post-2015 Ultimate Transportation Corridor (UTC). The 2015 traffic projections for State Route 125 (SR-125) are based on Caltrans' traffic projections and the San Diego Association of Governments' (SANDAG) Series 8 regional population and employment forecasts and assume completion of the future regional transportation system.

The 2015 peak hour Operating LOS includes all proposed State highway and transit service improvements. It also includes expansion and greater utilization of the existing arterial street network. Even with the inclusion of the proposed highway, transit and arterial improvements, and an increase in person trips, the 2015 peak hour Operating LOS for SR-125 for Segments 3 through 7 will be deficient.

The 2015 Transportation Concept LOS is based on the SANDAG Congestion Management Program (CMP). The CMP minimum standard of LOS 'E' is the 2015 Transportation Concept LOS for the main lanes on all of SR-125. With the exception of Segments 3, 4 and 7, the 2015 peak hour Operating LOS is equal to or better than the minimum CMP standard. In these segments, additional improvements such as the implementation of Transportation Control Measure (TCM), Transportation System Management (TSM), and Transportation Demand Management (TDM) strategies will be needed.

The 2015 Transportation Concept LOS for the High Occupancy Vehicle lanes is LOS 'C' and is based on the Caltrans District 11 minimum HOV LOS standard.

TABLE S-1
2015 TRANSPORTATION CONCEPT

	Segment/ County Post Mile	Location	No. Lanes/ Facility Type	ADT	Peak Hour D/C Ratio	Peak Hour Operating LOS*	Concept LOS**	Rural/ Urban
1	SD 0.0 - 9.6	SR-905 to San Miguel Road***	8F****	75,000	.58	B	E	U
2	SD 9.6- 11.2	San Miguel Road to SR-54***	8F	100,000	.77	C	E	U
3	SD 11.2 - R14.6	SR-54 to west junction SR-94 (RB)	6F+2HOV	140,000	1.23	F0*****	E	U
4	SD L13.2 - 15.5	East junction SR-94 to I-8	8F+ connectors	175,000	1.26	F1	E	U
5	SD 15.5 - 22.4	I-8 to SR-52	6F+ 2HOV	110,000	.97	E*****	E	U
6	SD 22.4 -24.7	SR-52 to urban/rural limits	6E	66,000	.98	E	E	U
7	SD 24.7 -28.5	Urban/rural limit to Scripps Poway Parkway	6E	70,000	1.04	F0	E	R
8	SD 28.5 -30.4	Scripps Poway Parkway to Poway/Espola Road	4E	29,000	.65	C	E	U

2HOV = Two High Occupancy Vehicle lanes
4E = Four lane expressway
6E = Six lane expressway
6F = Six lane freeway
8F = Eight lane freeway
ADT = Average Daily Traffic
CMP = Congestion Management Plan
D/C = Demand to Capacity
LOS = Level of Service
R = Rural
RB = Route Break
U = Urban

* Peak Hour Operating LOS includes the provision of State highway, arterial, and transit improvements.
** Concept LOS is based on the SANDAG CMP minimum LOS standard.
*** The final alignment for these segments is not determined at this time pending completion of further alignment studies and the proposed environmental documents.
**** The 8F facility is a Privatization project.
***** The peak hour D/C and 2015 peak hour Operating LOS shown are for the SOV lanes only. The Concept LOS for the HOV lanes is LOS 'C' and the 2015 peak hour Operating LOS for the HOV lanes is expected to be LOS 'C' or better.

The District 11 Transportation Concept Report Map on page 13 shows the 2015 peak hour Operating LOS, Concept LOS, and the 2015 Transportation Concept facility for all segments of SR-125.

ULTIMATE TRANSPORTATION CORRIDOR

The Ultimate Transportation Corridor (UTC) describes the long term (beyond the 20 year planning period) right of way requirements for a particular segment. The long term needs are determined by Advanced Transportation System Development (ATSD) activities which include investigation and analysis of Community Plans, General Plans, Transportation Plans, Land Use Plans, Environmental Documents, and other planning documents. The intent is to take advantage of or develop opportunities for long term right of way acquisition and to work with local and regional agencies to implement corridor preservation measures.

The UTC is shown in Table S-2 and proposes the number of lanes and facility type or transit or the transit alternative that may be needed to accommodate traffic growth beyond the year 2015. The UTC number of lanes and facility type are based on Caltrans planning studies and the transit alternative is based on Metropolitan Transit Development Board (MTDB) and SANDAG studies. The UTC for all of SR-125 is at least equivalent to the 2015 Transportation Concept facility. The UTC for Segments 1 and 2 includes the addition of two HOV lanes and/or a transit facility. The UTC for Segment 3 leaves sufficient right of way for the addition of two HOV or two Single Occupancy Vehicle (SOV) lanes or a transit facility. In Segment 4, the UTC calls for a study to add two HOV lanes. In Segments 5 and 6, the UTC is identical to the 2015 Transportation Concept facility. The UTC for Segment 7 is essentially identical to the 2015 Transportation Concept facility, but it also gives consideration to the construction of an interchange at the Scripps Poway Parkway/SR-125 junction. The UTC for Segment 8 is identical to the 2015 Concept facility.

TABLE S-2
ULTIMATE TRANSPORTATION CORRIDOR

Segment/ County Post-Mile	Location	No. Lanes/ Facility Type
1 SD 0.0 - 9.6	SR-905 to San Miguel Road*	Add 2 HOV lanes and/or transit facility
2 SD 9.6- 11.2	San Miguel Road to SR-54*	Add 2 HOV lanes and/or transit facility
3 SD 11.2 - R14.6	SR-54 to west junction SR-94 (RB)	Add 2 HOV or 2 SOV or transit facility
4 SD L13.2 - 15.5	East junction SR-94 to I-8	Study addition of 2 HOV lanes
5 SD 15.5 - 22.4	I-8 to SR-52	6F+2 HOV
6 SD 22.4 -24.7	SR-52 to urban/rural limits	6E
7 SD 24.7 -28.5	Urban/rural limit to Scripps Poway Parkway	6E and study construction of SR-125/Scripps Poway Parkway Interchange
8 SD 28.5 -30.4	Scripps Poway Parkway to Poway/Espola Road	4E

2HOV = Two High Occupancy Vehicle lanes
2SOV = Two Single Occupancy Vehicle lanes
4E = Four lane expressway
6E = Six lane expressway
6F = Six lane freeway
RB = Route Break

* The final alignment for these segments is not determined at this time pending completion of further alignment studies and the proposed environmental documents.

CONCEPT RATIONALE

An intermodal approach is necessary in order to provide for the projected increased person trips in the SR-125 corridor. The highway component of the 2015 Transportation Concept for SR-125 calls for the initial construction of a freeway facility in Segments 1 through 5, from SR-905 (P.M. SD 0.0) to SR-52 (P.M. SD 22.4), including a privately financed Segment 1. Caltrans traffic projections and SANDAG Series 8 Regional Traffic Forecasts show the need for the addition of HOV lanes in Segments 3 and 5 by the year 2015. An expressway facility is proposed for SR-125 north of SR-52 (P.M. SD 22.4) to Poway, however, it does not appear that there will be sufficient public funds available to construct this facility prior to the year 2015. Some combination of public and private funds may need to be developed.

The highway component of the 2015 Transportation Concept for SR-125 is described below in a segment specific format.

The 2015 Transportation Concept for Segments 1 and 2 is the construction of a new facility on a new alignment. The information and descriptions presented in this report for Segments 1 and 2 are for planning purposes only and are subject to change as additional data becomes available.

The proposed facility for Segment 1, which is from SR-905 (P.M. SD 0.0) to San Miguel Road (P.M. SD 9.6) is a Privatization project that will be developed by California Transportation Ventures (CTV) as an access controlled toll facility. A number of alignments are under study for Segment 1. These alignments are discussed extensively in the July, 1993 Draft Alternatives Report and the August, 1993 Final Alternatives Report for SR-125 South. The Alternatives Report will assist Caltrans decision makers in determining which project alternative alignments warrant further detailed study during the future Route 125 South Environmental Impact Report/Environmental Impact Statement (EIR/EIS) process.

In addition to these alignment alternatives, there may be a need to develop an interim four lane arterial through Proctor Valley from Telegraph Canyon Road in the Eastlake area northwest to Route 54 in the Bonita area if SR-125 is not built before the year 2000.

Segment 1 would initially be constructed as a four lane controlled access highway. The ultimate facility would include eight SOV lanes, two HOV lanes and/or a transit facility, and freeway to freeway interchanges at either end.

Numerous planning studies are underway related to cross-border transportation activities that could affect Segment 1 of SR-125. Detailed information regarding these activities can be found in a recent Caltrans report entitled Transportation Issues Along the California/Mexico Border dated September, 1993. In particular, a portion of the International Border Transportation Case Study will determine the feasibility of providing a new privately funded Port of Entry (POE) facility about three miles easterly of the existing Otay Mesa POE. This new POE would be accessible by a potential extension

of the SR-125 toll facility to the POE and then connecting to the Tecate toll road in Mexico. Legislation has been proposed to designate this extension as State Route 11.

Segment 2 is being studied as part of the EIR/EIS and is expected to be constructed at the same time as the Segment 1 toll facility. Segment 2 is from San Miguel Road (P.M. SD 9.6) to SR-54 (P.M. SD 11.2) and will be initially constructed as a four lane freeway with eventual upgrading to eight mixed flow lanes, two HOV lanes and/or a transit facility. Segment 2 will be funded by the local sales tax for transportation program (TransNet).

The 2015 Transportation Concept for Segment 3 is to upgrade an existing four lane conventional traversable route to a State highway. A Caltrans Project Report (PR) was completed for this segment in October, 1992. It proposed the construction of a six lane freeway with an 86 foot median for future conversion to an ultimate ten lane facility. This future facility could include eight SOV lanes and two HOV lanes, or six SOV lanes and four HOV lanes. In October, 1993 a Draft SR-54/SR-125 "Sweetwater" HOV Study was developed in response to a request from SANDAG to evaluate the possibility of early HOV implementation as part of initial freeway construction. Several alternatives were looked at; the preferred alternative was to construct an initial four SOV lanes and two HOV lanes. In March, 1994, this project was value engineered to further refine the preferred alternative and to look at other long term options. Therefore, the exact design of this facility and the construction staging processes are still being developed.

For Segment 4, the 2015 Transportation Concept is to upgrade the existing freeway to eight lanes and add freeway to freeway connectors at the future east SR-94/SR-125 junction. A Caltrans PR is currently being developed for these improvements.

In Segment 5, the 2015 Transportation Concept is to initially construct a TransNet funded six lane freeway with the later addition of two HOV lanes. A Caltrans PR was completed for this project in August,1989, and an EIR was completed in November, 1991. A portion of this segment from I-8 to Fletcher Parkway/Amaya Drive has already been constructed as an interim four lane facility.

Segments 6 and 7 are unconstructed and are proposed to be a six lane expressway on a new alignment. These segments are not part of the TransNet program and there is no funding currently identified to construct this expressway. However, the proposed SR-125 alignment for these segments abuts and encroaches within the proposed Fanita Ranch development project in the northern part of Santee. The Draft EIR for the Fanita Ranch Specific Plan includes the consideration of additional circulation facilities for the Specific Plan area. A proposed four lane arterial to be named Fanita Parkway will traverse the western boundary of Fanita Ranch and is generally on the same alignment as the proposed SR-125. This project could be acceptable for development as SR-125 if the facility conforms to State standards and is built for eventual widening to six lanes.

Segment 8 is mostly unconstructed and is proposed to be a four lane expressway. The facility will generally be in the Sycamore Canyon area between Scripps Poway Parkway (P.M. SD 28.5) and Garden Road (P.M. SD 29.6). It will use a new alignment northerly

from Garden Road to Poway/Espola Road (P.M. SD 30.4). This segment is not part of the TransNet program and no construction funding has been identified at this time.

For all segments, operational and safety improvements should be considered where appropriate.

The transit component of the 2015 Transportation Concept includes the establishment of transit service in Segments 1, 2 and 3 of the SR-125 corridor. For Segment 1 it includes the provision of nearby Light Rail Transit (LRT) service in one of the corridors identified in the March, 1991 SANDAG South Bay Rail Transit Extension Study. The study recommends the preservation of transit options in Segments 1 and 2. It also recommends further study of staged transit facilities, culminating in a fixed guideway transit line in the SR-125 corridor south of Orange Avenue. The March, 1993 MTDB South Bay Public Transportation Plan further analyzes LRT and express bus options for previously identified transit corridors, including Segments 1, 2 and 3 of SR-125. The 2015 Transportation Concept will be flexible enough to consider the inclusion of these conceptual transit improvements within the SR-125 corridor. Additionally for Segment 3, the October, 1992 Caltrans PR for this segment states that considerations for future transit facilities such as drop ramps, bus stations, and LRT service will not be precluded.

For Segments 4 and 5, future HOV lane additions will help accommodate potential express bus transit options.

For Segments 6 through 8, SANDAG completed a Future Transit Corridor Evaluation report in July, 1991 that screened major travel corridors in the region to determine the potential for future guideway transit service. The report looked at transit service in the SR-125 corridor between SR-52 and Poway. It also reviewed east-west corridors along SR-52 and Scripps Poway Parkway. The report concluded that SR-52 and SR-125 north of SR-52 should be considered as express bus corridors in the development of the long range transit corridor plan, but not be further evaluated as guideway corridors. Related to this SANDAG report, MTDB completed the Final Feasibility Report for the I-15 LRT Extension Alignment Study in March, 1992. This report includes an analysis of potential LRT service along portions of Poway Road and a potential automated guideway transit (AGT) service along portions of Scripps Poway Parkway.

An additional component of the 2015 Transportation Concept includes improvements to the arterial street system within the SR-125 corridor. Arterial street improvements such as additional lanes, preferential signal treatment, limitation and separation of left turn movements, limited driveways and other access controls should also be provided where necessary to help achieve the 2015 Transportation Concept LOS. Specifically, the completion of Scripps Poway Parkway from I-15 to SR-67 is part of the 2015 Transportation Concept for SR-125. Construction of the portion of the Parkway from I-15 to Community Road was completed in mid-1993. An additional piece of the Parkway from Community Road to Danielson Street has also been completed and the remaining portion easterly to SR-67 is scheduled for future construction. A Caltrans Project Study Report (PSR)/PR is currently being developed for a new intersection and widening at the SR-67/Scripps Poway Parkway junction.

The aviation component for SR-125 includes Brown Field, a general aviation facility providing private aircraft services. Brown Field is located west of the SR-125 corridor and is the fourth busiest general aviation airport in San Diego County. The aviation component formerly included the feasibility of a "TwinPorts" airport facility that would have combined the air operations of the existing Abelardo L. Rodriguez International Airport in Tijuana with a new San Diego regional airport. The TwinPorts would have straddled the United States/Mexico Border and would have been a major land use in the Otay Mesa area. Due to recent land use changes by the City of San Diego, as well as some recent political considerations, it is no longer appropriate to consider the TwinPorts concept as a realistic aviation alternative.

TSM measures in the 2015 Transportation Concept include the provision of Park and Ride facilities throughout the SR-125 corridor as the route is constructed. One location currently identified for a Park and Ride lot is at the future SR-125/SR-52 interchange.

2015 TRANSPORTATION CONCEPT FACILITY IMPROVEMENTS

Table S-3 shows facility improvements to SR-125 that are part of the 2015 Transportation Concept. The peak hour Demand to Capacity (D/C) ratio and peak hour Operating LOS listed assume completion of the proposed facility improvements. These improvements are also shown on the District 11 Transportation Concept Report Map on page 13.

TABLE S-3
2015 TRANSPORTATION CONCEPT FACILITY IMPROVEMENTS

	Segment/ County Post-Mile	Location	Improvement Description	Peak Hour D/C Ratio	Peak Hour Operating LOS*	Concept LOS**
1	SD 0.0 - 9.6	SR-905 to San Miguel Road***	Construct 8F****	.58	B	E
2	SD 9.6- 11.2	San Miguel Road to SR-54***	Construct 8F	.77	C	E
3	SD 11.2 - R14.6	SR-54 to west junction SR-94 (RB)	Construct 6F + 2HOV	1.23	F0*****	E
4	SD L13.2 - 15.5	East junction SR-94 to I-8	Upgrade from 6F to 8F and add freeway to freeway connectors	1.26	F1	E
5	SD 15.5 - 22.4	I-8 to SR-52	Construct 6F + 2HOV	.97	E*****	E
6	SD 22.4 -24.7	SR-52 to urban/rural limits	Construct 6E	.98	E	E
7	SD 24.7 -28.5	Urban/rural limit to Scripps Poway Parkway	Construct 6E	1.04	F0	E
8	SD 28.5 -30.4	Scripps Poway Parkway to Poway/Espola	Construct 4E	.65	C	E

2HOV = Two High Occupancy Vehicle lanes
4C = Four lane conventional highway
4E = Four lane expressway
6E = Six lane expressway
6F = Six lane freeway
8F = Eight lane freeway
CMP = Congestion Management Plan
D/C = Demand to Capacity
LOS = Level of Service
RB = Route Break

* Peak Hour Operating LOS includes the provision of State highway, arterial, and transit improvements.
** Concept LOS is based on the SANDAG CMP minimum LOS standard.
*** The final alignment for these segments is not determined at this time pending completion of further alignment studies and the proposed environmental document.
**** The 8F facility is a Privatization project.
***** The peak hour D/C and 2015 peak hour Operating LOS shown are for the SOV lanes only. The Concept LOS for the HOV lanes is LOS 'C' and the 2015 peak hour Operating LOS for the HOV lanes is expected to be LOS 'C' or better.

TRANSPORTATION CONCEPT REPORT
STATE ROUTE 125 (SR-125)
11-SD-125 P.M. 0.0 - 30.4

INTRODUCTION

Statement of Planning Intent

The system planning process consists of three products: the District System Management Plan (DSMP), the Transportation Development Plan (TDP), and the Transportation Concept Report (TCR).

The DSMP is a strategic and policy planning document, that describes how the transportation system will be maintained, managed, and developed over the next 20 years and beyond. The DSMP is developed in partnership with regional and local transportation planning agencies. It describes the overall goals and policies which relate to District transportation issues. The goals and policies consider the entire transportation system, regardless of jurisdiction, and address all modes which move people, goods, and services. The DSMP summarizes 20 year planning concepts and proposed transportation improvements on a system wide level, and influences the development of future transportation concepts and development plans.

The TDP identifies transportation corridor improvements for the five year period following the seven year State Transportation Improvement Program (STIP). The TDP analyzes proposed system improvements in terms of timing, local and regional priorities, interregional travel and system continuity using two funding scenarios. Together, the STIP and the TDP constitute the first 12 years of the 20 year planning period and act as a benchmark for measuring progress toward attainment of the 20 year Transportation Concept.

The TCR is a planning document which describes the Department's basic approach to the development of a given corridor. Considering reasonable financial constraints and projected travel demand, the TCR establishes a 20 year transportation planning concept and identifies modal transportation options needed to achieve the concept. The concept considers operating levels of service (LOS), modal facility types, and vehicle occupancy rates. The TCR also considers potential long term needs for the corridor beyond the 20 year planning period. The long term needs focus on corridor preservation, the Ultimate Transportation Corridor (UTC) and new technologies. Minimum right of way widths are also established in the UTC for all conventional highway portions of the transportation system.

The TCR is a preliminary planning phase that leads to subsequent programming and the project development process. As such, the specific proposed nature of

improvements (i.e., number of lanes, access control, etc.) may change in later project development stages, with final determinations made during the project study report (PSR), project report (PR), and design phases.

Each TCR must be viewed as an integral part of a planned system. The TCR is based on the completion of the 20 year system. The system has been developed to meet anticipated travel demand generated from regional growth forecasts. Removal of any portion of a route from the system will adversely affect travel on parallel or intersecting routes.

The TCR is prepared by Caltrans District staff in cooperation with local and regional agencies. They will be updated as necessary as conditions change or new information is obtained.

ROUTE DESCRIPTION

The future southern terminus of State Route 125 (SR-125) is at the junction with SR-905, Post Mile (P.M. SD 0.0). SR-125 will extend 34 miles to the north, terminating at possible future SR-56 in the City of Poway. The portion of SR-125 from SR-905 (P.M. SD 0.0) to San Miguel Road (P.M. SD 9.6) is a privatization project by California Transportation Ventures (CTV) to construct a toll road. All of SR-125 lies within San Diego County.

SR-125 is part of the original California Freeway and Expressway (F&E) System adopted by the State legislature in 1959. In June of 1976, with local support, the California Transportation Commission (CTC) rescinded the route adoption for the section of SR-125 between then SR-75 (now SR-905) (P.M. SD 0.0) and SR-54 (P.M. SD 11.2). In 1983 the CTC readopted a 1.5 mile section between the now proposed SR-905/SR-125 junction and the United States/Mexico International Border Crossing at Otay Mesa as SR-125. Subsequently, this section has been changed from SR-125 to SR-905, a nonchargeable Interstate route. The remainder of the unadopted portion of SR-125, from SR-905 (P.M. SD 0.0) to SR-54 (P.M. SD 11.2), is the focus of a single project/environmental study leading to route adoption, environmental clearance and freeway agreements. CTV is a key contributor to this study for the portion of SR-125 from SR-905 (P.M. SD 0.0) to San Miguel Road (P.M. SD 9.6).

Purpose of Route

SR-125 is a mostly unconstructed north-south route which will carry international, interregional, commuter and recreational travel. SR-125 will traverse the Cities of San Diego, Chula Vista, La Mesa, El Cajon, Santee, and Poway and the unincorporated communities of Bonita and Spring Valley. The existing portion of the route is in La Mesa, beginning at the east junction of SR-94 (P.M. SD L13.2) and ending at Interstate 8 (I-8) (P.M. SD 15.5). A northerly extension to Fletcher Parkway/Amaya Drive (P.M. SD 16.1) has recently been constructed.

The southern portion of the route in the cities of San Diego and Chula Vista will serve as a major commuter route for the developing Otay Mesa and Eastlake communities. It will also provide access for goods movement through the Otay Mesa International Border Crossing, located less than two miles south of SR-125 on SR-905.

The portion of the route northerly of I-8 (P.M. SD 15.5) will also serve commuter traffic from the cities of El Cajon and Santee and San Diego. It will also provide access to the soon to be constructed SR-52, which will help relieve congestion on I-8. The portion of the route northerly of SR-52 (P.M. SD 22.4) will serve as access to and from the City of Poway for commuter and intraregional traffic to and from the San Diego metropolitan area.

The southern terminus of SR-125 will be SR-905 (P.M. SD 0.0) and the northern terminus will be Poway/Espola Road (P.M. SD 30.4). SR-125 will intersect with SR-54, SR-94 and I-8 and one future State route, SR-52 (P.M. SD 22.4) in Santee. SR-125 will be the only north-south freeway in metropolitan San Diego east of I-15 and I-805. Other State routes parallel to SR-125 are I-5 and SR-163.

Existing Facility Classifications

The functional classification for SR-125 is shown in Table 1. The portion of SR-125 from SR-905 (P.M. SD 0.0) to I-8 (P.M. SD 15.5) will be included in the proposed National Highway System (NHS).

SR-125 is not included as a part of the Interregional Road System (IRRS).

The existing portion of SR-125, from the east junction of SR-94 (P.M. SD L13.2) to I-8 (P.M. SD 15.5), is designated as part of the National Network for Surface Transportation Assistance Act (STAA) Trucks. In accordance with the Truck Kingpin-to-Rear-Axle Length State Highway System Evaluation Report dated December 1989, no portions of SR-125 have been identified as geometrically inadequate for use by truck tractor-semitrailer combinations having a 40 foot kingpin-to-rear-axle length.

SR-125 from the east junction of SR-94 to I-8 is in the California State Scenic Highway System and has been designated as an official State Scenic Highway.

For maintenance programming purposes, the State highway system has been classified as Class 1, 2, and 3 highways based on the Maintenance Service Level (MSL) descriptive definitions. The MSL 1 designation contains route segments in urban areas functionally classified as Interstate, Other Freeway or Expressway, or Other Principal Arterial. In rural areas, the MSL 1 designation contains route segments functionally classified as Interstate or Other Principal Arterial.

MSL 2 contains route segments classified as an Other Freeway/Expressway or Other Principal Arterial not in MSL 1, route segments functionally classified as minor arterials not in MSL 3, and route segments with a 2015 Transportation Concept of Maintain and Improve.

MSL 3 indicates a route or route segment with the lowest maintenance priority. Typically, MSL 3 contains route segments with a 2015 Transportation Concept of Maintain Only. These are route segments functionally classified as major or minor collectors and local roads, route segments with relatively low traffic volumes and route segments being considered for relinquishment, recession, or where a new alignment will replace the existing facility. MSL 3 roads are not candidates for pavement rehabilitation but are to be maintained with maintenance funds. There is an exception if a road cannot be maintained without rehabilitation. Route segments where the District does not anticipate spending money and route segments where route continuity is necessary are also assigned an MSL 3 designation.

The existing portion of SR-125, from the east junction of SR-94 to I-8, is classified as an MSL 2. The entire route should be classified as an MSL 1 upon its completion.

Route Segments

SR-125 is examined in eight segments for traffic analysis and other purposes. Table 1 lists the segments and includes some of the information used as criteria for segment divisions. A map is attached at the end of this report which indicates the location and post miles of the segments used in this analysis.

TABLE 1
ROUTE SEGMENTATION

Segment/ County Post Mile	Location	Existing No. Lanes/ Facility Type	Urban/ Rural	Functional Classification
1 SD 0.0 - 9.6	SR-905 to San Miguel Road*	Unconstructed**	R	Other Principal Arterial***
2 SD 9.2 - 11.2	San Miguel Road to SR-54*	Unconstructed	U	Other Freeway or Expressway
3 SD 11.2 - R14.6	SR-54 to west junction SR-94 (RB)	4C****	U	Other Freeway or Expressway
4 SD 13.2 - 15.5	East junction SR-94 to I-8	6F	U	Other Freeway or Expressway
5 SD 15.5 - 22.4	I-8 to SR-52	4C****	U	Other Freeway or Expressway
6 SD 22.4 - 24.7	SR-52 to urban/rural limit	Unconstructed	U	Other Freeway or Expressway
7 SD 24.7 - 28.5	Urban/rural limit to Scripps Poway Parkway	Unconstructed	R	Other Principal Arterial
8 SD 28.5 - 30.4	Scripps Poway Parkway to Poway/Espola Road	Unconstructed	U	Minor Arterial

2HOV = Two High Occupancy Vehicle lanes
4C = Four lane conventional highway
6F = Six lane freeway
R = Rural
RB = Route Break
U = Urban

* The final alignment for these segments is not determined at this time, pending completion of further alignment studies and the proposed environmental document.

** An 8F Privatization project is planned for this segment.

*** This segment is urban from Telegraph Canyon Road to San Miguel Road.

**** Traversable route, not currently in the State Highway System.

Existing Facility

SR-125 is a six lane freeway on a flat gradeline from the east junction of SR-94 (P.M. SD L13.2) to I-8 (P.M. SD 15.5). There is an additional transition lane extending in the southbound direction on SR-125 to facilitate traffic movement on the I-8 eastbound to SR-125 southbound ramp. There is also a transition lane on northbound SR-125 to accommodate traffic movement from eastbound SR-94 to northbound SR-125. There is no direct connector from westbound SR-94 to northbound SR-125, however, access to northbound SR-125 is provided via an on-ramp extending north from Campo Road.

According to the San Diego Association of Governments (SANDAG) 1994 Regional Transportation Plan (RTP), the only significant regional arterial within the existing SR-125 corridor that could provide an alternative to commuters wishing to avoid peak hour congestion on the State highway is Spring Street in the City of La Mesa. It is located westerly of SR-125 and connects I-8 and SR-125.

There is a ramp meter currently in operation on the Campo Road northbound ramp to SR-125. There is an additional ramp meter located on the eastbound I-8 to southbound SR-125 ramp.

There are four Park and Ride lots near to or within the SR-125 corridor. They provide a total of 180 spaces for use by ridesharing commuters. Park and Ride lots are located at the following locations in the City of La Mesa.

1. Grossmont Boulevard and Bancroft Drive
2. Severin Drive and Bancroft Drive
3. Severin Drive and Murray Drive
4. I-8 at Grossmont Center Drive

Although there is no transit service operating on SR-125, existing fixed route bus service adjacent to the SR-125 corridor on surface streets is provided by San Diego Transit and the San Diego County Transit System. San Diego Transit Route 15 provides daily service between Downtown San Diego and El Cajon, with stops at the La Mesa Boulevard Trolley Station, the Grossmont Trolley Station and the El Cajon Transit Center. Service is provided every 30 minutes Monday through Friday and hourly on weekends and holidays. San Diego County Transit Route 854 provides daily service every 30 minutes between Rancho San Diego and Lakeside with stops at the La Mesa Spring Street Trolley Station, the La Mesa Boulevard Trolley Station and the Grossmont Trolley Station.

Regarding existing light rail transportation, the San Diego Trolley East Urban Line is located westerly and northerly of the SR-125 corridor. It provides daily service between Downtown San Diego and El Cajon at regular intervals from approximately 5:00 A.M. to 2:00 A.M. Average daily patronage for the East Urban Line is currently over 17,000 passengers.

A physical description of the existing facility in a segment specific format is shown in Table 2.

TABLE 2
EXISTING FACILITY

Segment/ County Post Mile	No. Lanes/ Facility and Width	Shoulder Width Outside	Shoulder Width Inside	Maximum R/W Width	Median Width	Grade Line
1 SD 0.0 - 9.6*	Unconstructed**					
2 SD 9.6 - 11.2*	Unconstructed					
3 SD 11.2 - R14.6 (RB)	4C***					
4 SD R13.2 - 15.5	6F @ 12	8	2 - 12	200	22	Flat
5 SD 15.5 - 22.4	4C***					
6 SD 22.4 - 24.7	Unconstructed					
7 SD 24.7 - 28.5	Unconstructed					
8 SD 28.5 - 30.4	Unconstructed					

2HOV = Two High Occupancy Vehicle lanes
4C = Four lane conventional highway
6F = Six lane freeway
RB = Route Break
R/W = Right of Way

Note: Widths are in feet.

* The final alignment for these segments is not determined at this time, pending completion of further alignment studies and the proposed environmental document.

** An 8F Privatization project is planned for this segment.

*** Traversable route not currently in the State Highway System, no additional roadway data is available.

Average accident data for the three year period from January 1, 1989 to January 1, 1992 was analyzed for SR-125. Criteria used for determining an accident concern is based on whether actual total accident rates exceeded expected total accident rates by one and one-half times. There are no accident concerns for any segment of SR-125.

ROUTE ANALYSIS

This section further discusses existing conditions and introduces future Post 1994 State Transportation Improvement Program (STIP)/No Build conditions for SR-125. This section also includes a land use/corridor growth and demographic analysis for existing and future conditions in the SR-125 corridor.

Existing and Future (No Build) Operating Conditions

Table 3 shows existing and future (2005 No Build and 2015 No Build) operating conditions for SR-125. Existing conditions reflect 1993 data. The future conditions are based on Caltrans' traffic projections and SANDAG Series 8 Regional Population and Employment forecasts for the years 2005 and 2015. Future conditions also assume the completion of only those projects in the local transportation sales tax (TransNet) program and those in the 1994 STIP.

TABLE 3
EXISTING AND FUTURE (NO BUILD) OPERATING CONDITIONS

Segment/ County Post Mile	Year	No. Lanes/ Facility Type	ADT	PHV	Peak Hour D/C Ratio	Peak Hour Operating LOS
1 SD 0.0 - 9.6*	1993	Unconstructed				
	2005	4F**	60,000	3,600	0.93	E
	2015	4F**	75,000	4,500	1.16	F_0
2 SD 9.2 - 11.2*	1993	Unconstructed				
	2005	4F	80,000	4,800	1.24	F_0
	2015	4F	100,000	6,000	1.55	F_3
3 SD 11.2 - R15.6 (RB)	1993	4C****	29,000	1,700	0.71	D
	2005	6F	75,200	4,500	0.77	D
	2015	6F+2HOV	94,000	5,600	0.86	D
4 SD L13.2 - 15.5	1993	6F	87,000	4,300	0.74	C
	2005	6F	107,000	6,400	1.09	F_0
	2015	6F	127,000	7,500	1.27	F_1
5 SD 15.5 - 22.4	1993	4C****	20,000	1,200	0.51	C
	2005	6F	88,000	5,100	0.87	D
	2015	6F	110,000	6,400	1.08	F_0
6 SD 22.4 - 24.7	1993	Unconstructed				
	2005	Unconstructed				
	2015	Unconstructed				
7 SD 24.7 - 28.5	1993	Unconstructed				
	2005	Unconstructed				
	2015	Unconstructed				
8 SD 28.5 - 30.4	1993	Unconstructed				
	2005	Unconstructed				
	2015	Unconstructed				

2HOV = Two High Occupancy Vehicle lanes
4C = Four lane conventional highway
6F = Six lane freeway
ADT = Average Daily Traffic
D/C = Demand to Capacity
HOV = High Occupancy Vehicle
LOS = Level of Service
PHV = Peak Hour Volume (one way)
RB = Route Break
SOV = Single Occupancy Vehicle

* The final alignment for these segments is not determined at this time, pending completion of further alignment studies and the proposed environmental document.
** The 4F facility is a Privatization project.
*** The peak hour D/C and 2015 peak hour Operating LOS shown are for the SOV lanes only. The Concept LOS for the HOV lanes is LOS 'C' and the 2015 peak hour Operating LOS for the HOV lanes is expected to be LOS 'C' or better.
**** Traversable route not currently in State Highway System.

Sources: Caltrans and San Diego Association of Governments (SANDAG)

Corridor Growth and Demographics

The SANDAG Series 8 Regional Population and Employment Forecast anticipates an increase in population in the San Diego Region from 2.5 million people in 1990 to 3.63 million people in 2015. This represents a 45 percent increase in population. This large increase in population will create a demand for additional housing, employment, and public facilities. Complementary land use and transportation improvements will be required.

The land use, population and employment forecasts are discussed by segment in this section. Summary tables for the route follow the narrative.

SR-125 will originate at SR-905 in the Otay Mesa community of the City of San Diego, near the United States/Mexico International Boundary. The Otay Mesa area and Tijuana have all experienced rapid growth since 1980. This growth has been stimulated by the change in land use from thousands of acres of farmland to the current land use designation of industrial/commercial and residential. Otay Mesa has been designated by the City of San Diego to be a primary industrial and commercial center for the region. The Otay Mesa area has a daytime population of 3,600 persons at present and is the location of 2,700 jobs. The SANDAG Series 8 population forecast projects for Otay Mesa an expansion of population by 20 times and employment by 10 times the current level by 2015. Much of this growth will be related to international commerce between the United States and Mexico. Across the International Border lies the rapidly growing City of Tijuana with a current population of over one million and a population growth rate twice that of the San Diego region. The City of Tijuana is projected to grow to two million by 2015.

The approved North American Free Trade Agreement (NAFTA) will contribute to the already growing goods movement between the two countries. Due to the presence of Maquiladora (twin plant) manufacturing/assembly industries in Otay Mesa and Tijuana, Mexico has already greatly increased trade and travel through the Otay Mesa Border Crossing at the terminus of SR-905.

SR-125 will traverse north through unincorporated areas of the County of San Diego, including the major new community of Otay Ranch, and through the developing community of Eastlake in the City of Chula Vista. The older portions of the City of Chula Vista are not expected to experience significant growth because of built out conditions. Contrarily, the newer Eastlake area will experience rapid growth over the next 20 years, due in part to the extension of future SR-125 into and through the community. Large parcels of undeveloped land exist in the Otay Ranch area, which is planned for development in the future. SANDAG projects a 40 percent increase in population in Chula Vista and its sphere of influence by 2015.

Northerly of Eastlake, the SR-125 corridor generally consists of a variable mix of single and multiple family residential units and small commercial development. The route's alignment has not yet been determined. Several alignments are under study, including potential locations traversing the nearby communities of Bonita and La Presa. Major features of this area are the Sweetwater Reservoir and the adjacent Sweetwater

Regional County Park. This area is part of the County's Sweetwater Subregional area, which is projected by SANDAG to experience a 256 percent increase in population between 1990 and 2015.

SR-125 will then continue through the community of Spring Valley along the present alignment of Sweetwater Road. Spring Valley is a mostly built out area of low to moderate density residences and business areas.

Between SR-94 and I-8, the existing portion of SR-125 passes through the City of La Mesa, where land use in and adjacent to the SR-125 corridor consists primarily of older established single and multiple family residential development. Due to the built out nature of La Mesa, SANDAG projects that the population of La Mesa is expected to only grow by 4 percent by 2015.

North of I-8, proposed SR-125 will traverse the Cities of La Mesa, El Cajon and Santee. Land use in these areas is variable; El Cajon is a stable, established residential community that is not expected to experience significant growth in the future. In accordance with SANDAG 2015 projections, the population of El Cajon and its sphere of influence will grow by 16.9 percent. Contrarily, rapid population growth will occur in the City of Santee over the next 20 years, specifically due to the availability of large parcels of undeveloped land in the northern portions of Santee and the future extensions of SR-52 and SR-125 through the City. Santee is expected to experience a 23 percent increase in population by 2015.

North of Santee, SR-125 will traverse through the undeveloped Sycamore Canyon area within the County of San Diego, enter the City of Poway and terminate at Poway/Espola Road. Poway is a recently incorporated city that is expected to experience considerable growth, particularly in employment, by 2015.

Major employment areas within the SR-125 corridor can generate significant traffic volumes. Listed in Table 4 are employment growth statistics for these employment areas.

TABLE 4
EMPLOYMENT GROWTH

Area	1990	2000	Percentage Change From Base Year	2015	Percentage Change From Base Year
Otay Mesa	4,700	8,300	76.6	26,800	470.2
Grossmont Shopping Center	6,400	6,800	6.3	8,400	31.3
Scripps Poway Parkway Industrial	500	800	60.0	5,200	940.0

Source: San Diego Association of Governments (SANDAG)

Table 5 shows estimated current population, 2015 projected population, and the resultant growth rate for Tijuana and the areas adjacent to the SR-125 corridor.

TABLE 5
POPULATION GROWTH

Jurisdiction	1991	2015	Percentage Change
South Bay Subregional Area	118,300	207,400	75.3
Chula Vista	137,700	207,700*	50.8
Sweetwater Subregional Area	48,200	162,000	236.0
Spring Valley	74,100	92,200	24.4
La Mesa	53,300	55,200	3.6
El Cajon	89,300	107,600*	20.5
Santee	53,200	65,200	22.6
Elliot/Navajo Subregional Area	89,700	107,000	19.3
Poway	44,500	49,500	11.2
Tijuana	1,000,000	2,000,000	100.0

* City and Sphere of Influence

Source: San Diego Association of Governments (SANDAG)

Table 6 lists current and future household, employment and population data for a two mile wide corridor the length of SR-125.

TABLE 6
HOUSEHOLD, EMPLOYMENT, AND POPULATION GROWTH

County Post Mile	Location	Year	House-holds	Percent Change From Base Year	Employ-ment	Percent Change From Base Year	Population	Percent Change From Base Year
SD 0.0 - 11.2	SR-905 to SR-54	1990	9,300		6,800		32,400	
		2000	16,700	79.6	9,400	38.2	58,600	80.9
		2010	26,300	182.8	15,700	130.9	86,100	165.7
		2015	30,600	229.0	20,300	198.5	98,600	204.3
SD 11.2-R14.6	SR-54 to west junction SR-94	1990	26,200		13,600		82,000	
		2000	27,300	4.2	13,700	0.7	88,900	8.4
		2010	29,500	12.6	16,100	18.4	91,400	11.5
		2015	30,500	16.4	16,700	22.8	93,100	13.5
SD L13.2 - 15.5	East junction SR-94 to I-8	1990	10,500		10,800		23,900	
		2000	10,800	2.9	10,700	-0.9	25,800	7.9
		2010	11,300	7.6	12,000	11.1	27,100	13.4
		2015	11,500	9.5	12,300	13.9	27,500	15.1
SD 15.5 - 22.4	I-8 to SR-52	1990	20,400		21,900		49,900	
		2000	20,700	1.5	21,900	0.0	53,200	6.7
		2010	21,900	7.4	24,300	11.0	55,400	11.0
		2015	22,100	8.3	25,300	15.5	55,500	11.2
SD 22.4 - 30.4	SR-52 to Poway/Espola Road	1990	8,200		5,500		25,400	
		2000	9,400	14.6	7,000	27.3	30,100	18.5
		2010	13,800	68.3	9,600	74.5	44,300	74.4
		2015	14,800	80.5	10,800	96.4	46,800	84.3
Totals		1990	74,600		58,600		213,600	
		2000	84,900	13.8	62,700	7.0	256,600	20.1
		2010	102,800	37.8	77,700	32.6	304,300	42.5
		2015	109,500	46.8	85,400	45.7	321,500	50.5

Source: San Diego Association of Governments (SANDAG)

Additional traffic generators within the SR-125 corridor will significantly increase congestion on area surface streets and on SR-125. There are a substantial number of small developments that are not listed that will have a cumulative impact on traffic in the corridor. Proposed major developments that will generate at least 7,000 trips and significantly impact traffic on SR-125 are shown in Table 7.

TABLE 7
TRIP INDUCING MAJOR DEVELOPMENT PROJECTS

Segment	Proposed Development	Dwelling Units	Acreage	Trips Generated Daily
1	Otay International Center		449	67,700
1*	Brown Field Business Park		155	14,000
1*	Otay Mesa Business Park		73	14,000
1*	La Media Business Park		41	8,000
1*	Otay Mesa III LTQ		76	15,000
1*	Otay Ranch Business Park		320	64,000
1*	Otay Ranch Individual Group		81	13,000
1*	San Diego Business Park		80	7,000
1	Eastlake I Sectional Planning Area	3,683	1,267	36,800
1	Eastlake III - Olympic Training Center	2,008	1,030	65,300
1	Salt Creek Supplemental EIR	1,200	2,817	32,000
1	Rancho San Miguel		2,600	30,000
5	Fanita Ranch Specific Plan	2,925	2,550	48,900
	TOTAL:			415,700

EIR = Environmental Impact Report

* Although these projects are adjacent to the SR-905 corridor, traffic impacts to SR-125 may be significant.

Source: Caltrans District 11 Planning Studies Branch

TRANSPORTATION CONCEPT (2015)

The 2015 Transportation Concept LOS is determined by a detailed analysis of each route. Factors that are influential in the process include land use, terrain, travel characteristics, relative importance of the route, relationship to other routes, urban or rural areas, functional classification, average daily traffic, safety, and cost of possible improvements. The components of the 2015 Transportation Concept include State highway, arterial street, rail and transit improvements. The State highway component of the 2015 Transportation Concept is composed of two parts; (1) a minimum tolerable LOS for the peak hours, and (2) a description of the physical facility necessary to accommodate that LOS. Additional components of the 2015 Transportation Concept include Transportation Control Measure (TCM) air quality improvement tactics, Transportation System Management (TSM) and Transportation Demand Management (TDM) improvements. These items are discussed in subsequent sections of this report. The 2015 Transportation Concepts have been approved by District management and

reflect a reasonable expectation of accomplishments rather than unattainable aspirations.

Table 8 shows the specific 2015 Transportation Concept facility type and LOS for each segment of SR-125. The 2015 peak hour Operating LOS shown below reflects both main lanes and auxiliary lanes if applicable. It is also based on Caltrans' traffic projections and SANDAG Series 8 Regional Traffic Forecasts and assumes completion of the future regional transportation system and all proposed State highway, arterial street and rail and transit improvements. Additional traffic volumes for Segments 1 through 3 have been projected for buildout conditions beyond the year 2015 and are shown in the Caltrans July, 1993 Draft Alternatives Report for SR-125 South.

In San Diego County, the 2015 Transportation Concept LOS for the main lanes is based on the SANDAG Congestion Management Program (CMP). The CMP will be updated annually to address congestion problems in a coordinated and cooperative manner with various county entities. The elements of the CMP include a TDM and trip reduction element, a transit standards element, a land use impact analysis program, a seven year Capital Improvements Program (CIP), and an element defining LOS standards for the highway portion of the regional transportation system. For all segments of SR-125, the Transportation Concept LOS of "E" for the main lanes is based on the CMP minimum LOS standard. In Segments 1, 2, 5, 6, and 8, the 2015 peak hour Operating LOS is equal to or better than the CMP minimum LOS standard. For Segments 3, 4 and 7, additional regional TCM, TDM, and TSM improvements will be needed to improve the 2015 peak hour Operating LOS in order to attain the 2015 Transportation Concept LOS.

The Transportation Concept LOS for the HOV lanes is LOS 'C', and reflects the Caltrans District 11 minimum HOV LOS standard.

TABLE 8
2015 TRANSPORTATION CONCEPT

Segment/ County Post-Mile	Location	No. Lanes/ Facility Type	ADT	Peak Hour D/C Ratio	Peak Hour Operating LOS*	Concept LOS**	Urban/ Rural
1 SD 0.0 - 9.6	SR-905 to San Miguel Road ***	8F****	75,000	.58	B	E	U
2 SD 9.6 - 11.2	San Miguel Road to SR-54***	8F	100,000	.77	C	E	U
3 SD 11.2- R14.6	SD-54 to west junction SR-94 (RB)	6F+2HOV	140,000	1.23	F_0 *****	E	U
4 SD L13.2 - 15.5	East junction SR-94 to I-8	8F+Connectors	175,000	1.26	F_1	E	U
5 SD 15.5 - 22.4	I-8 to SR-52	6F+2HOV	110,000	.97	E*****	E	U
6 SD 22.4 - 24.7	SR-52 to urban/rural limits	6E	66,000	.98	E	E	U
7 SD 24.7 - 28.5	Urban/rural limit to Scripps Poway Parkway	6E	70,000	1.04	F_0	E	R
8 SD 28.5 - 30.4	Scripps Poway Parkway to Poway/Espola	4E	29,000	.65	C	E	U

2HOV = Two High Occupancy Vehicle lanes
4C = Four lane conventional highway
4E = Four lane expressway
6E = Six lane expressway
6F = Six lane freeway
8F = Eight lane freeway
ADT = Average Daily Traffic
CMP = Congestion Management Plan
D/C = Demand to Capacity
LOS = Level of Service
R = Rural
RB = Route Break
U = Urban

* Peak hour Operating LOS includes provision of State highway, arterial, and transit improvements.

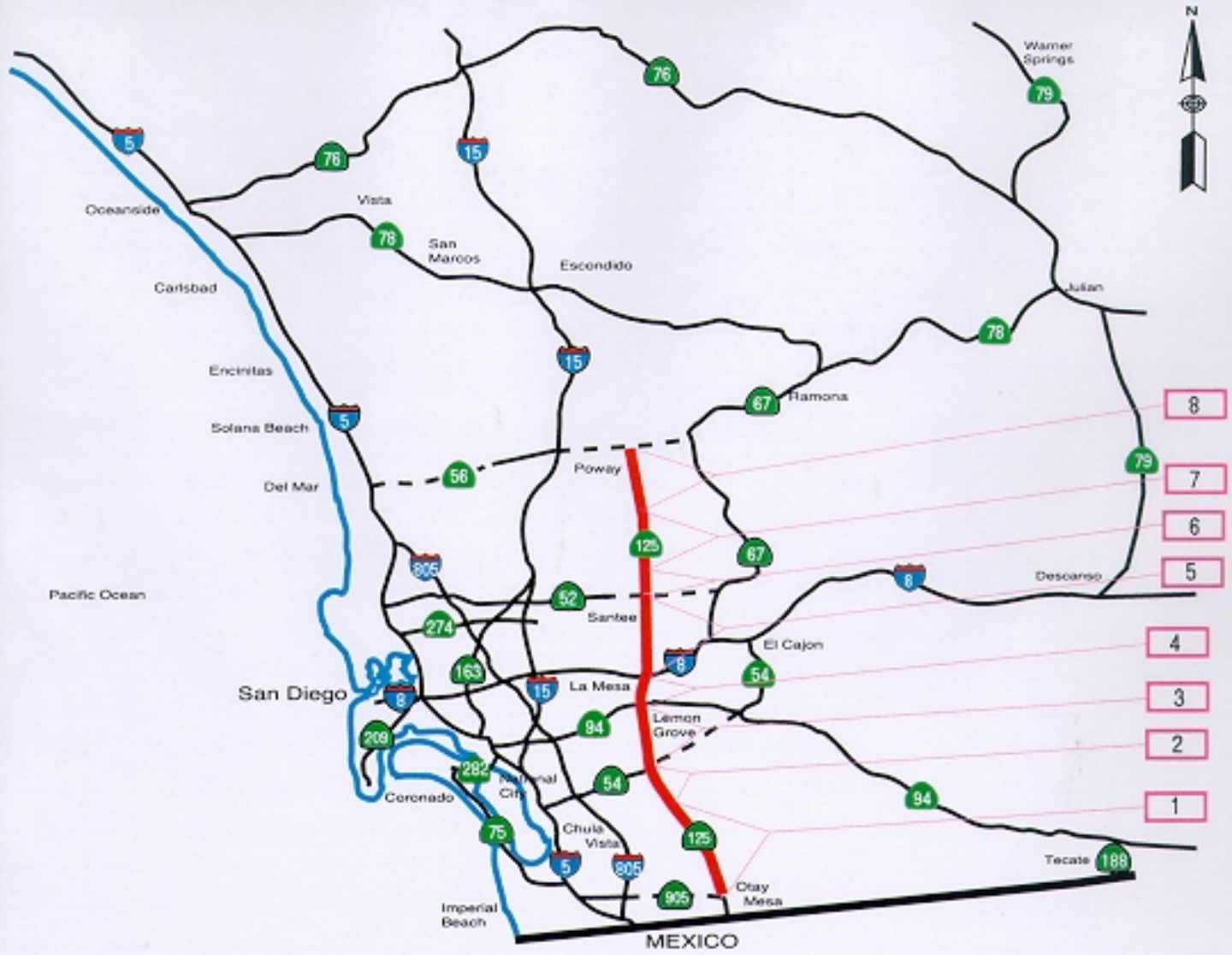
** Concept LOS is based on the SANDAG CMP minimum LOS standard.

*** The final alignment for these segments is not determined at this time pending completion of further alignment studies and the proposed environmental document.

**** The 8F facility is a Privatization project.

***** The peak hour D/C and 2015 peak hour Operating LOS shown are for the SOV lanes only. The Concept LOS for the HOV lanes is LOS 'C' and the 2015 peak hour Operating LOS for the HOV lanes is expected to be LOS 'C' or better.

2015 Transportation Concept



2015 Transportation Concept Facility Improvements

Segment/ County Post Mile	Location	Improvement Description	Peak Hour D/C Ratio	Peak Hour Operating LOS	Concept LOS
1 SD 0.0 - 9.6	SR-905 to San Miguel Road	Construct 8F	.58	B	E
2 SD 9.6 - 11.2	San Miguel Road to SR-54	Construct 8F	.77	C	E
3 SD 11.2 - R14.6	SR-54 to West Junction SR-94 (RB)	Construct 6F + 2HOV	1.23	F0	E
4 L13.2 - 15.5	East Junction SR-94 to I-8	Upgrade from 6F to 8F and add freeway to freeway connectors	1.26	F1	E
5 SD 15.5 - 22.4	I-8 to SR-52	Construct 6F + 2HOV	.97	E	E
6 SD 22.4 - 24.7	SR-53 to Urban/Rural Limit	Construct 6E	.98	E	E
7 SD 24.7 - 28.5	Urban/Rural Limit to Scripps Poway Parkway	Construct 6E	1.04	F0	E
8 SD 28.5 - 30.4	Scripps Poway Parkway to Poway/Espola	Construct 4E	.65	C	E

Map not to scale

September 1994
System Planning Branch

CONCEPT RATIONALE

An intermodal approach is necessary in order to provide for the projected increased person trips in the SR-125 corridor. The highway component of the 2015 Transportation Concept calls for the initial construction of a freeway facility in Segments 1 through 5, from SR-905 (P.M. SD 0.0) to SR-52 (P.M. SD 22.4), including a privately financed Segment 1. Caltrans traffic projections and SANDAG Series 8 Regional Traffic Forecasts show the need for the addition of High Occupancy Vehicle (HOV) lanes in Segments 3 and 5 by the year 2015. An expressway and conventional highway facility is proposed for SR-125 north of SR-52 to Poway, however, it does not appear there will be sufficient public funds available to construct these facilities prior to the year 2015. Some combination of public and private funds may need to be developed.

Specifically, the highway component of the 2015 Transportation Concept for SR-125 is described below in a segment specific format.

The 2015 Transportation Concept for Segments 1 and 2 is the construction of a new facility on a new alignment. The information and descriptions presented in this report for Segments 1 and 2 are for planning purposes only and are subject to change as additional data becomes available.

The proposed facility for Segment 1, which is from SR-905 (P.M. SD 0.0) to San Miguel Road (P.M. SD 9.6), is a Privatization project that will be developed by California Transportation Ventures (CTV) as an access controlled toll facility. A number of alignments are under study for Segment 1. They would extend westerly of the Sweetwater Reservoir to the SR-54/SR-125 junction near Bonita and Spring Valley. These alignments are discussed extensively in the July, 1993 Draft Alternatives Report and the August, 1993 Final Alternatives Report for SR-125 South. The Alternatives Report will assist Caltrans decision makers in determining which project alignments warrant further detailed study during the Route 125 South Environmental Impact Report/Environmental Impact Statement (EIR/EIS) process.

In addition to the alignment alternatives, there may be a need to develop an interim four lane arterial through Proctor Valley and traversing northwest from Telegraph Canyon Road in the Eastlake area to Route 54 in the Bonita area. This facility would serve local traffic if SR-125 is not built before the year 2000.

Segment 1 would initially be constructed as a four lane controlled access highway. The ultimate facility would include eight SOV lanes, two HOV lanes and/or a transit facility within the corridor. Freeway to freeway interchanges would be provided at either end.

Numerous planning studies are underway related to cross-border transportation activities that could affect Segment 1 of SR-125. Detailed information regarding these activities can be found in a recent Caltrans report entitled Transportation Issues Along the California/Mexico Border dated September, 1993. In particular, a portion of the International Border Transportation Case Study will determine the feasibility of providing a new privately funded Port of Entry (POE) facility about three miles easterly of the existing Otay Mesa POE. This new POE would be accessible by a potential extension

of the SR-125 toll facility to the POE and then connecting to the Tecate toll road in Mexico. Legislation has been proposed to designate this extension as State Route 11.

Segment 2 is being studied as part of the EIR/EIS and is expected to be constructed at the same time as the Segment 1 toll facility. Segment 2 is from San Miguel Road (P.M. SD 9.6) to SR-54 (P.M. SD 11.2) and will initially be constructed as a four lane freeway with eventual upgrading to eight SOV lanes, two HOV lanes, and/or a transit facility. Segment 2 will be funded by the local sales tax for transportation program (TransNet).

The 2015 Transportation Concept for Segment 3 is to upgrade an existing four lane conventional traversable route to a State highway. A Caltrans Project Report (PR) was completed for this segment in October, 1992. It proposed the construction of a six lane freeway with an 86 foot median for future conversion to an ultimate ten lane facility. This future facility could include eight SOV lanes and two HOV lanes, or six SOV lanes and four HOV lanes. In October, 1993 a Draft SR-54/SR-125 "Sweetwater" HOV Study was developed in response to a request from SANDAG to evaluate the possibility of early HOV implementation as part of initial freeway construction. Several alternatives were looked at; the preferred alternative was to construct an initial four SOV lanes and two HOV lanes. In March, 1994, this project was value engineered to further refine the preferred alternative and to look at other long term options. Therefore, the exact design of this facility and the construction staging processes are still being developed.

For Segment 4 the 2015 Transportation Concept is to upgrade the existing freeway to eight lanes and add freeway to freeway connectors at the future east SR-94/SR-125 junction. A Caltrans PR has been started for these improvements, but a completion date has not been determined.

In Segment 5, the 2015 Transportation Concept is to initially construct a TransNet funded six lane freeway with the later addition of two HOV lanes. A Caltrans PR for this project was completed in August, 1989 and the EIR was completed in November, 1991. A portion of this segment from I-8 to Fletcher Parkway/Amaya Drive has already been constructed as an interim four lane facility.

Segments 6 and 7 are unconstructed at present and are proposed to be a six lane expressway on a new alignment. These segments are not part of the TransNet program and there is no funding currently identified to construct this expressway. However, the proposed SR-125 alignment for these segments abuts and encroaches within the proposed Fanita Ranch development project in the northern part of Santee. The Draft EIR for the Fanita Ranch Specific Plan includes the consideration of additional circulation facilities for the Specific Plan area. A proposed four lane arterial to be named Fanita Parkway will traverse the western boundary of Fanita Ranch and is generally on the same alignment as the proposed SR-125. Fanita Parkway is generally the same alignment as the proposed SR-125. This project could be acceptable for development as SR-125 if the facility conforms to State standards and is built for eventual widening to six lanes.

Segment 8 is unconstructed and is proposed to be a four lane expressway. The facility will generally be in the Sycamore Canyon Road area between Scripps Poway Parkway

(P.M. SD 28.5) and Garden Road (P.M. SD 29.6). It will use a new alignment northerly from Garden Road to Poway Road/Espola Road (P.M. SD 30.4). This segment is not part of the TransNet program and no construction funding has been identified at this time.

For all segments, operational and safety improvements should be considered where appropriate.

Another component of the 2015 Transportation Concept includes the establishment of transit service in Segments 1, 2 and 3 of the SR-125 corridor. For Segment 1, it includes the provision of nearby LRT service in one of the corridors identified in the March, 1991 SANDAG South Bay Rail Transit Extension Study. The study recommends the preservation of transit options throughout Segments 1 and 2. It also recommends further study of staged transit facilities, culminating in a fixed guideway transit line, in the SR-125 corridor south of Orange Avenue. The March, 1993 MTDB South Bay Public Transportation Plan further analyzes LRT and express bus options for previously identified transit corridors, including Segments 1, 2 and 3 of SR-125. The 2015 Transportation Concept will be flexible enough to consider the inclusion of these conceptual transit improvements within the SR-125 corridor. Additionally for Segment 3, the October, 1992 Caltrans PR states that considerations for future transit facilities such as drop ramps, bus stations and LRT service will not be precluded.

For Segments 4 and 5, future HOV lane additions will help to accommodate potential express bus options.

For Segments 6 through 8, SANDAG completed a Future Transit Corridor Evaluation report in July 1991 that screened major travel corridors in the region to determine the potential of each corridor for future guideway transit service. This report looked at transit service in the SR-125 corridor between SR-52 and Poway (Segments 6 through 8). It also reviewed east-west corridors along SR-52 and Scripps Poway Parkway. The report concluded that SR-52 and SR-125 north of SR-52, should be considered as express bus corridors in the development of the long range transit corridor plan, but not be further evaluated as guideway corridors. Related to this SANDAG report, MTDB completed the Final Feasibility Report for the I-15 LRT Extension Alignment Study in March, 1992. This report includes an analysis of potential LRT service along Poway Road from I-15 to Community Road in Poway and a potential automated guideway transit (AGT) alternative along Scripps Poway Parkway from I-15 to Community Road.

An additional component of the 2015 Transportation Concept includes improvements to the arterial street system within the SR-125 corridor. Capacity of existing arterials within the corridor is affected by physical inadequacies, access conflicts, numerous traffic signals, and general traffic congestion. Arterial traffic flow can be increased by realignment and/or widening, correcting physical inadequacies and minimizing side friction. Use of arterial streets can increase corridor mobility, reduce peak period demands on the facility, and provide alternative routes for relatively short intraregional trips.

Arterial street improvements such as additional lanes, preferential signal treatment, limitation and separation of left turn movements, limited driveways and other access controls should also be provided where necessary to help achieve the 2015 Concept LOS. Specifically, the completion of Scripps Poway Parkway from I-15 to SR-67 is part of the 2015 Transportation Concept for SR-125. Construction of the portion of the Parkway between I-15 and Community Road was completed in mid-1993. An additional piece of the Parkway from Community Road to Danielson Street has also been completed and the remaining portion easterly to SR-67 is scheduled for future construction. A Caltrans Project Study Report (PSR) is currently being developed for a new intersection and widening at the SR-67/Scripps Poway Parkway junction.

The aviation component for SR-125 includes Brown Field, a general aviation facility providing private aircraft services. It is located west of future SR-125 and is the fourth busiest general aviation airport in San Diego County. Brown Field had an annual operations of 139,400 in 1984, the last year for which information is currently available. Brown Field based aircraft number 244 with a capacity of 329 permanent aircraft parking availability.

The Otay Mesa area has also been studied by SANDAG and the City of San Diego as a possible location for a new regional airport. The study considered the feasibility of a "TwinPorts" airport facility that would have combined the air operations of the existing Abelardo L. Rodriguez International Airport in Tijuana with a new San Diego regional airport. The "TwinPorts" would have straddled the United States/Mexico Border and would have been a major land use in the Otay Mesa area. Due to recent land use changes by the City of San Diego, as well as recent political considerations, the "TwinPorts" concept is no longer a realistic aviation alternative.

TSM measures in the 2015 Transportation Concept include the provision of Park and Ride lots throughout the corridor as the route is constructed. One location currently identified for a Park and Ride lot is at the future SR-125/SR-52 (P.M. SD 22.4) interchange in Santee.

It is neither physically nor financially feasible to build ourselves out of congestion on portions of this route. Adding additional highway capacity by itself will not be sufficient to lessen congestion to reasonable and acceptable levels.

Congestion relief without major highway improvements can be achieved by a variety of methodologies. Some of these methodologies are incorporated in the Regional Air Quality Plan as TCM's. TCM's contribute to congestion relief and improvements to air quality. Another methodology separate from the Regional Air Quality Plan is the implementation of TSM improvements. These topics are discussed extensively in the following sections.

AIR QUALITY

Based on a recent decision by the State Air Resources Board, the smog classification for San Diego County has been downgraded from "severe" to "serious". The San Diego region's air basin is not expected to be in attainment with State and federal air quality standards until after 1997. The 1988 California Clean Air Act (CCAA) requires the development of a new air quality plan from air districts that did not attain the State's standards in 1987. The San Diego County Air Pollution Control District (APCD) adopted the Regional Air Quality Strategy (RAQS) in June 1992. The plan incorporates strategies directed at reducing pollutants and increasing vehicle occupancy in an effort for the region to achieve the State's standards. The RAQS will be implemented by the San Diego Air Pollution Control Board, Caltrans, SANDAG, the transit operators, and the cities of this region.

As part of this RAQS, SANDAG has developed transportation related strategies towards attainment of the plans goals. These strategies are composed of TCM programs planned to achieve the following requirements of the CCAA: a 1.4 minimum average vehicle occupancy during weekday commute hours by 1999, no net increase in emissions relative to population growth after 1997, and contribute to the required reduction in District-wide emissions of five percent per year, averaged every consecutive three-year period. The TCM program is comprised of the following measures: (1.) TDM; (2.) Transportation Capacity Expansion; (3.) Traffic Systems Management; and (4.) Indirect Source Control (ISC). These four measures and their tactics and elements are summarized in outline form on the following page. A more detailed discussion of each measure follows the outline.

TRANSPORTATION CONTROL MEASURES PROGRAM SUMMARY

1.0 TDM MEASURE

- 1.1 Commute Travel Reduction Program Tactic
  - A. Employment Trip Reduction Program and Ordinance
  - B. Ridesharing Program Element
  - C. Parking Management Program Element
  - D. Telecommuting Element
  - E. Compressed Work Week Element
  - F. Employer Transit Subsidy Element
  - G. Flexible Work Hours Element
  - H. Staggered Work Hours Element

- 1.2 College Travel Reduction Program Tactic
  - A. Travel Reduction Program and Ordinance Element
  - B. Student Transit Pass and Subsidy Element

- 1.3 Goods Movement/Truck Operation Program Tactic
  - A. Goods Movement/Truck Travel Reduction Ordinance Element
  - B. Incident Management and Prevention Program Element
  - C. Motorist Information System Element

- 1.4 Non-Commute Travel Reduction Program Tactic

2.0 TRANSPORTATION CAPACITY EXPANSION MEASURE

- 2.1 Transit Improvements and Expansion Program Tactic
- 2.2 Vanpool Program Tactic
- 2.3 HOV Lanes Tactic
- 2.4 Park and Ride Lot Facilities Tactic
- 2.5 Bicycle Facilities Tactic

3.0 TRAFFIC SYSTEMS MANAGEMENT MEASURE

- 3.1 Traffic Flow Improvements Tactic

4.0 ISC MEASURE

1.0 TDM Measure

The TDM measure consists of four principle tactics. The first tactic is (1.1) the Commute Travel Reduction Program. It is composed of eight elements. They are (A.) Employment Trip Reduction Program and Ordinance, (B.) Ridesharing Program, (C.) Parking Management Program, (D.) Telecommuting, (E.) Compressed Work Week, (F.) Employer Transit Subsidy, (G.) Flexible Work Hours, and (H.) Staggered Work Hours elements.

One important element of the Commute Travel Reduction Program Tactic as it relates to congestion relief is the employment trip reduction program and ordinance. The goal of this tactic is to reduce transportation source emissions by increasing the average number of persons per vehicle during peak weekday periods. As part of this, the San Diego City Council adopted the "City of San Diego Transportation Demand Management Ordinance" in September 1989. Implementation for worksites with 50 or more employees began in January 1990.

Another important element is the Ridesharing Program. It provides for the establishment of Transportation Management Associations (TMA's) to encourage employees to commute by alternative modes. Currently, the SR-125 corridor is served by three subregional TMAs; the South Bay TMA, TM-8 and the Mid County TMA.

The second tactic in the proposed TDM measure is (1.2) the College Travel Reduction Program and Ordinance. It contains two elements. They are (A.) the Travel Reduction Program and Ordinance, and (B.) the Student Transit Pass Subsidy Program. The College Trip Reduction Program and Ordinance will have a similar impact on congestion relief as the Commute Travel Reduction Program.

The third tactic in the proposed TDM measure is (1.3) the Goods Movement/Truck Operation Program. It is comprised of three elements. They are (A.) the Goods Movement/Truck Travel Reduction Ordinance, (B.) the Incident Management and Prevention Program, and (C.) the Motorist Information System.

An important element of the Goods Movement/Truck Operation Program as it relates to congestion relief is the provision of the Motorist Information System. Consistent with the goals of the element, the District 11 Long Range Operations Plan (LROP) proposed a Transportation Management Center (TMC), which is now functioning as a Primitive Traffic Operations Center (PTOC). More recent plans include the development of a 24-hour TMC. It will further aid rapid identification of accidents and other non-recurrent freeway congestion and will issue appropriate information to motorists through the use of changeable message signs, highway advisory radio, and possibly by the use of in-vehicle computers.

The fourth tactic in the proposed TDM measure is (1.4) the Non-Commute Travel Reduction Program. This program will educate drivers in ways to reduce or change the use of their automobiles with a goal of reducing auto emissions. The programs goal is a reduction equivalent to one trip per day per driver.

2.0 Transportation Capacity Expansion Measure

The second major TCM measure is the Transportation Capacity Expansion Measure. The purpose of the Transportation Capacity Expansion Measure is to reduce vehicle miles traveled in the region. The Transportation Capacity Expansion Measure consists of five tactics. They are (2.1) the Transit Improvements and Expansion Program, (2.2) the Vanpool Program, (2.3) HOV Lanes, (2.4) Park and Ride Lot Facilities, and (2.5) Bicycle Facilities.

3.0 Traffic Systems Management Measure

The third major TCM measure is the Traffic Systems Management Measure. The goal of the Traffic Flow Improvement Tactic is to improve the flow of traffic through the coordination of traffic signals and computerized signal controls and to achieve a 10 percent increase in speed on arterial streets by the year 2000. The LROP recommends that a plan be prepared for the systematic review of all signalized intersections on State highways. This plan will include a discussion of signalized local parallel routes.

4.0 ISC Measure

The fourth major TCM measure is the ISC Program. The purpose of the program is to reduce the emissions of motor vehicles associated with land uses identified as indirect sources. The controls will employ TCMs and land use measures to attain the air quality goals.

TRANSPORTATION SYSTEM MANAGEMENT STRATEGIES

TSM is a strategy whose goal is the accommodation of travel demand on existing transportation facilities without increasing congestion. Several TSM improvements have previously been mentioned in the Air Quality section. An additional TSM improvement is the provision of ramp metering systems. The District 11 Ramp Meter Development Plan calls for future ramp meter installation at approximately 170 additional locations throughout San Diego County. Within Segment 5 of SR-125, ramp meters will be installed on the southbound on-ramps at the Fletcher Parkway, Navajo Road, Grossmont College Drive, and Mission Gorge Road interchanges. Ramp meters will also be installed at additional appropriate locations as portions of SR-125 are completed.

OTHER ITEMS

New methodologies can assist in providing better management of the future transportation system. Advanced technology research is one tool that can be used to improve the efficiency of the future transportation system. The "SMART" Corridor concept will employ a number of technological innovations, including in-vehicle

navigation systems, computerized roadway sensors, changeable message signs, and television cameras.

CONGESTION PRICING STUDIES

An additional strategy that should be studied in the future is congestion pricing, which is a direct market incentive to ensure that transportation system users pay the "real" costs of the transportation benefits they receive. One purpose of congestion pricing is to reduce travel demand. With the advent of technological advances such as electronic toll collection and traffic management (ETTM) and automatic vehicle identification (AVI) systems, congestion pricing could be developed for a wide variety of transportation facilities.

COMPARISON OF CONCEPTS

The purpose of this section is to compare alternative Transportation Concepts that were considered. The 1993 Transportation Concept for the year 2015 is compared with the 1984 Route Concept Report (RCR) for the year 2005.

In 1984, the Concepts were set based on the SANDAG Series 6 Population and Traffic Forecasts for the year 2005. In 1989, the SANDAG Series 7 Population and Traffic Forecasts for the year 2010 were developed, and some urban area TCRs were updated in 1990 and 1991 to reflect the Series 7 forecasts. The SR-125 TCR has not been updated since 1984, therefore, Table 9 is comprised of a segment by segment comparison between the 1984 RCR and this current updated TCR.

TABLE 9
COMPARISON OF 2005 AND 2015 CONCEPTS

1984 Route Concept for 2005 (Series 6 2005 Traffic)		1993 Transportation Concept for 2015 (Series 8 2015 Traffic)	
Segment/ County Post Mile	**No. Lanes/ Facility Type/ Concept LOS**	**Segment/ County Post Mile**	**No. Lanes/ Facility Type/ Concept LOS**
1A SD L0.0 - L1.7	4F/B	1 SD 0.0 - 9.6	8F/E
1B SD L1.7 - 11.2	4F/B	2 SD 9.6 - 11.2	8F/E
2 SD 11.2 - R14.6 (RB)	4F/D	3 SD 11.2 - R14.6	6F+2HOV/E
3 SD L13.2E - 15.5	4F/D	4 SD L13.2 - 15.5	8F+Connectors/E
4A SD 15.5E - 22.4	6F/D	5 SD 15.5 - 22.4	6F+2HOV/E
4B SD 22.4 - 24.7	6E/D	6 SD 22.4 - 24.7	6E/E
5 SD 24.7 - 28.5	6E/D	7 SD 24.7 - 28.5	6E/E
6 SD 28.5 - 30.4	6E/D	8 SD 28.5 - 30.4	4E/E

2HOV = Two High Occupancy Vehicle lanes
4C = Four lane conventional highway
4E = Four lane expressway
4F = Four lane freeway
6E = Six lane expressway
6F = Six lane freeway
8F = Eight lane freeway
LOS = Level of Service

EXTERNAL PLANS COORDINATION

The 2015 Transportation Concept facility for SR-125 is consistent with the 1994 Regional Transportation Plan (RTP). The 2015 Transportation Concept facility is also consistent with the Circulation Elements of the General Plans of the Cities of Chula Vista, La Mesa, El Cajon, Santee, and Poway.

The 2015 Transportation Concept facility is mostly consistent with the County of San Diego Circulation Element of the General Plan. It identifies SR-125 as a freeway from SR-905 (P.M. SD 0.0) to Proctor Valley Road, however, it is identified only as a Prime Arterial northerly of Proctor Valley Road to Bonita Road, on an alignment to the west of the Sweetwater Reservoir. SR-125 is not shown between Bonita Road and SR-54. The County Circulation Element is consistent with the 2015 Transportation Concept facility of a freeway from SR-54 (P.M. SD 11.1) to SR-52 (P.M. SD 22.4). Northerly of SR-52 to the terminus of the route in Poway (P.M. SD 30.4), the County classification of SR-125 is a Prime Arterial. Caltrans will request that the County Circulation Element be amended to show SR-125 as a freeway from SR-905 (P.M. SD 0.0) to SR-52 (P.M. SD 22.4), as an expressway northerly to Scripps Poway Parkway (P.M. SD 28.5) and as an expressway northerly to Poway/Espola Road (P.M. SD 30.4).

Table 10 identifies the SR-125 segments where, with the 2015 Transportation Concept Facility in place, the 2015 peak hour Operating LOS remains at a deficient level. Table 11 also illustrates the LOS's that could be achieved by enlarging the mainlane facility beyond the Transportation Concept Facility size. For those segments the table lists increasingly larger mainlane facility sizes, starting with the number of lanes called for in the Transportation Concept and ending with the number of lanes required to achieve a nondeficient LOS "D". The resultant peak hour Demand to Capacity (D/C) ratio and 2015 peak hour Operating LOS is listed to the right of the "Alternative Number of Lanes" column, with the "2015 Operating LOS" and "Concept LOS" highlighted.

TABLE 10
MAINLANES REQUIRED TO ACHIEVE ALTERNATIVE LEVELS OF SERVICE (2015)

Segment/ County Post Mile	Alternative No. of Lanes/ Facility Type	Peak Hour D/C	Peak Hour Operating LOS
3 SD 11.2 - R14.6	6F+2HOV (TCR Facility)	1.23	F_0 (2015 Operating LOS)
	8F+2HOV	.93	E
	10F+2HOV	.74	C (Concept LOS = E)
4 SD L13.2 - 15.5	8F+Connectors (TCR Facility)	1.26	F_1 (2015 Operating LOS)
	10F+Connectors	1.01	F_0

		12F+Connectors	.84	D (Concept LOS = E)
5	SD 15.5 - 22.4	6F+2HOV (TCR Facility)	.97	E (2015 Operating LOS)
		8F+2HOV	.73	C (Concept LOS = E)
6	SD 22.4 - 24.7	6E (TCR Facility)	.98	E (2015 Operating LOS)
		6F	.69	C (Concept LOS = E)
7	SD 24.7 - 28.5	6E (TCR Facility)	1.04	F_0 (2015 Operating LOS)
		6F	.73	C (Concept LOS = E)

2HOV = Two High Occupancy Vehicle lanes
4C = Four lane conventional highway
4E = Four lane expressway
6F = Six lane freeway
8F = Eight lane freeway
10F = Ten lane freeway
12F = Twelve lane freeway
14F = Fourteen lane freeway
D/C = Demand to Capacity
LOS = Level of Service
TCR = Transportation Concept Report

2015 TRANSPORTATION CONCEPT FACILITY IMPROVEMENTS

Table 11 shows facility improvements to SR-125 that are part of the 2015 Transportation Concept. The peak hour Demand to Capacity (D/C) ratio and peak hour Operating LOS listed assume completion of the proposed facility improvements. These improvements are also shown on the District 11 Transportation Concept Report Map on page 13.

TABLE 11
2015 TRANSPORTATION CONCEPT FACILITY IMPROVEMENTS

Segment/ County Post-Mile	Location	Improvement Description	Peak Hour D/C Ratio	Peak Hour Operating LOS*	Concept LOS**
1 SD 0.0 - 9.6	SR-905 to San Miguel Road***	Construct 8F****	.58	B	E
2 SD 9.6- 11.2	San Miguel Road to SR-54***	Construct 8F	.77	C	E
3 SD 11.2 - R14.6	SR-54 to west junction SR-94 (RB)	Construct 6F + 2HOV	1.23	F0*****	E
4 SD L13.2 - 15.5	East junction SR-94 to I-8	Upgrade from 6F to 8F and add freeway to freeway connectors	1.26	F1	E
5 SD 15.5 - 22.4	I-8 to SR-52	Construct 6F + 2HOV	.97	E*****	E
6 SD 22.4 -24.7	SR-52 to urban/rural limits	Construct 6E	.98	E	E
7 SD 24.7 -28.5	Urban/rural limit to Scripps Poway Parkway	Construct 6E	1.04	F0	E
8 SD 28.5 -30.4	Scripps Poway Parkway to Poway/Espola	Construct 4E	.65	C	E

2HOV = Two High Occupancy Vehicle lanes
4C = Four lane conventional highway
4E = Four lane expressway
6E = Six lane expressway
6F = Six lane freeway
8F = Eight lane freeway
CMP = Congestion Management Plan
D/C = Demand to Capacity
LOS = Level of Service
RB = Route Break

* Peak hour Operating LOS includes provision of State highway, arterial, and transit improvements.
** Concept LOS is based on the SANDAG CMP minimum LOS standard.
*** The final alignment for these segments is not determined at this time, pending completion of further alignment studies and the proposed environmental document.
**** The 8F facility is a Privatization project.
***** The peak hour D/C and 2015 peak hour Operating LOS shown are for the SOV lanes only. The Concept LOS for the HOV lanes is LOS 'C' and the 2015 peak hour Operating LOS is expected to be LOS 'C' or better.

ULTIMATE TRANSPORTATION CORRIDOR

The UTC describes the long term (beyond the 20 year planning period) right of way requirements for a particular segment. The long term needs are determined by Advanced Transportation System Development (ATSD) activities which include investigation and analysis of Community Plans, General Plans, Transportation Plans, Land Use Plans, Environmental Documents, and other planning documents. The intent is to take advantage of or develop opportunities for long term right of way acquisition and to work with local and regional agencies to implement corridor preservation measures.

The UTC proposes the number of lanes and the facility type for all segments. It also includes the minimum right of way width in feet for the conventional highway portions of the route. This width can be variable depending upon the dimensions of cross-sectional elements and specific circumstances which may require narrow widths. Minimum right of way width includes the roadbed, shoulder, clear recovery zone, and clearance from the right of way line to the catch point of the cut or fill slope. Additional right of way may be required for structures, slope modifications, and drainage facilities.

The UTC number of lanes and facility type are based on Caltrans planning studies and the transit alternative is based on San Diego MTDB and SANDAG studies. The UTC for all of SR-125 is at least equivalent to the 2015 Transportation Concept facility. Additions to the Concept facility are discussed in Table 12 in a segment specific format. The UTC for Segments 1 and 2 includes the addition of two HOV lanes and/or a transit facility. The UTC for Segment 3 leaves sufficient right of way for the addition of two HOV or SOV lanes, or a transit facility to be determined later. In Segment 4, the UTC calls for a study to add two HOV lanes. The UTC for Segments 5 and 6 is identical to the concept. In Segment 7, the UTC also considers the construction of an interchange at the Scripps Poway Parkway/SR-125 intersection. The UTC facility for Segment 8 is identical to the 2015 Concept facility.

TABLE 12
ULTIMATE TRANSPORTATION CORRIDOR

	Segment/ County Post-Mile	Location	No. Lanes/ Facility Type
1	SD 0.0 - 9.6	SR-905 to San Miguel Road*	Add 2 HOV lanes and/or transit facility
2	SD 9.6- 11.2	San Miguel Road to SR-54*	Add 2 HOV lanes and/or transit facility
3	SD 11.2 - R14.6	SR-54 to west junction SR-94 (RB)	Add 2 HOV or 2 SOV or transit facility
4	SD L13.2 - 15.5	East junction SR-94 to I-8	Study addition of 2 HOV lanes
5	SD 15.5 - 22.4	I-8 to SR-52	6F+2 HOV
6	SD 22.4 -24.7	SR-52 to urban/rural limits	6E
7	SD 24.7 -28.5	Urban/rural limit to Scripps Poway Parkway	6E and study construction of the SR-125/Scripps Poway Parkway Interchange
8	SD 28.5 -30.4	Scripps Poway Parkway to Poway/Espola Road	4E

2HOV = Two High Occupancy Vehicle lanes
2SOV = Two Single Occupancy Vehicle lanes
4E = Four lane expressway
6E = Six lane expressway
6F = Six lane freeway
RB = Route Break

* The final alignment for these segments is not determined at this time pending completion of further alignment studies and the proposed environmental document.

LIST OF SYSTEM PLANNING ACRONYMS

ADT	Average Daily Traffic
APCD	Air Pollution Control District
ATSD	Advanced Transportation System Development
CBD	Central Business District
CMP	Congestion Management Program
CTC	California Transportation Commission
D/C	Demand Volume to Capacity Ratio
DSMP	District System Management Plan
FAI	Federal Aid Interstate
FAP	Federal Aid Primary
FAS	Federal Aid Secondary
FAU	Federal Aid Urban
HOV	High Occupancy Vehicle
IRRS	Interregional Route System
ISTEA	Intermodal Surface Transportation Efficiency Act
LOS	Level of Service
LROP	Long Range Operations Plan
LRT	Light Rail Transit
MSL	Maintenance Service Level
MTDB	Metropolitan Transit Development Board
NAFTA	North American Free Trade Agreement
PHV	Peak Hour Volume
PM	Post Mile
PR	Project Report
PSR	Project Study Report
PTOC	Primitive Traffic Operations Center
POE	Port of Entry
RCR	Route Concept Report
RTP	Regional Transportation Plan
R/W	Right of Way
SANDAG	San Diego Association of Governments
SOV	Single Occupancy Vehicle
STAA	Surface Transportation Assistance Act
STIP	State Transportation Improvement Program
TCM	Transportation Control Measure
TCR	Transportation Concept Report
TDM	Transportation Demand Management
TDP	Transportation Development Plan
TMA	Transportation Management Association
TMC	Transportation Management Center
TSM	Transportation Systems Management
UTC	Ultimate Transportation Corridor

SMART CORRIDOR (Author's Definition) Employs technology to improve the operating efficiency of all the roadways within a corridor in order to reduce congestion.

LEVEL OF SERVICE (LOS) DEFINITIONS

LOS is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. A LOS definition generally describes these conditions in terms of such factors as speed, travel time, freedom to maneuver, comfort and convenience, and safety. LOS definitions can generally be categorized as follows:

LOS	D/C	Congestion/Delay	Traffic Description
		(Used for two and four lane freeways and expressways)	
"A"	<.34	None	Free Flow
"B"	0.35-0.52	None	Free to stable flow, light to moderate volumes
"C"	0.53-0.69	None to Minimal	Stable flow, moderate volumes freedom to maneuver noticeably restricted
"D"	0.70-0.92	Minimal to Substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver
"E"	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor

LOS	D/C	Congestion/Delay	Traffic Description
		(Used for six lane freeways and expressways)	
"A"	<.39	None	Free Flow
"B"	0.40-0.59	None	Free to stable flow, light to moderate volumes
"C"	0.60-0.74	None to Minimal	Stable flow, moderate volumes freedom to maneuver noticeably restricted
"D"	0.75-0.92	Minimal to Substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver
"E"	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor
		(Used for freeways with eight or more lanes)	
"A"	<.42	None	Free Flow
"B"	0.43-0.62	None	Free to stable flow, light to moderate volumes
"C"	0.63-0.79	None to Minimal	Stable flow, moderate volumes freedom to maneuver noticeably restricted

"D"	0.80-0.92	Minimal to Substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver
"E"	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor
		(Used for all freeways and expressways)	
"F_0"	1.01-1.25	Considerable, 0-1 hour delay	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go
"F_1"	1.26-1.35	Severe, 1-2 hour delay	Very heavy congestion, very long queues
"F_2"	1.36-1.45	Very severe, 2-3 hour delay	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods
"F_3"	> 1.46	Extremely severe, 3+ hours of delay	Gridlock
		(Used for all conventional highways)	
"B"	<0.45	None	Free to stable flow, light to moderate volumes
"C"	0.46 - 0.65	None to Minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted
"D"	0.66 - 0.85	Minimal to Substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver
"E"	0.86 - 1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor
"F"	>1.00	Considerable delay measured in average travel speed (MPH). Signalized segments experience delays >60.0 seconds per vehicle.	Forced or breakdown flow

I approve this Transportation Concept Report as a guide for development of SR-125 over the next 20 years.

Submitted By:

Carol Boland — 9/19/94

CAROL BOLAND, Chief
Systems Planning Branch

Date

Recommended By:

Carl R West — 9-19-94

CARL R. WEST
Deputy District Director
Transportation Planning and Demand Management

Date

Approved By:

Gary L. Gallegos — 12-19-94

GARY L. GALLEGOS
District Director

Date